

1. (Once Amended) An apparatus, comprising:

a vacuum chamber wall defining a main cavity and an opening;

an exhaust port in fluid connection with the [central] main cavity for establishing a vacuum in the main cavity; [and]

a cover for sealing the opening when the cover is supported by the chamber wall, comprising:

a first section adjacent to the main cavity, wherein the first section of the cover is supported by the chamber wall;

a second section on a side of the first section opposite of the main cavity, wherein the second section is supported by the first section; and

a pocket between the first section and the second section, wherein the pocket extends above the region of the first section upon which the critical element is supported; and

a critical element supported by a region of the first section and extending into the main cavity from the first section, wherein the support between the second section and the first section is not above the support of the critical element by the first section.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Once Amended) The apparatus, as recited in claim [6] 1, wherein the critical element is an electrode, and further comprising a channel extending from the main cavity to the pocket.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (New) The apparatus, as recited in claim 1, wherein the second section is supported by the first section only where the first section is supported by the chamber walls.

19. (New) The apparatus, as recited in claim 18, wherein the critical element is an electrode.

20. (New) The apparatus, as recited in claim 19, further comprising a radio frequency power source electrically connected to the electrode.

21. (New) The apparatus, as recited in claim 1, wherein the critical element is an electrode.

22. (New) The apparatus, as recited in claim 21, further comprising a radio frequency power source electrically connected to the electrode.

23. (New) An apparatus, comprising:

a vacuum chamber wall defining a main cavity and an opening;

an exhaust port in fluid connection with the main cavity for establishing a vacuum in the main cavity;

a cover for sealing the opening when the cover is supported by the chamber wall,
comprising:

a first section adjacent to the main cavity, wherein the first section of the cover is supported by the chamber wall;

a second section on a side of the first section opposite of the main cavity, wherein the second section is supported by the first section only where the first section is supported by the chamber walls; and

a pocket between the first section and the second section, wherein the pocket extends above the region of the first section upon which the critical element is supported; and

a critical element supported by a region of the first section and extending into the main cavity from the first section.

24. (New) The apparatus, as recited in claim 23, wherein the critical element is an electrode.

25. (New) The apparatus, as recited in claim 24, further comprising a radio frequency power source electrically connected to the electrode.

26. (New) The apparatus, as recited in claim 25, further comprising a channel extending between the pocket and the main cavity.

27. (New) The apparatus, as recited in claim 26, wherein the cover further comprises a vacuum tight seal between the first section and the second section.

28. (New) The apparatus, as recited in claim 23, wherein the cover further comprises a vacuum tight seal between the first section and the second section.